

Serial No.: 10/078,742  
Art Unit: 2622***REMARKS*****1. Present Status of Patent Application**

In response to the final Office Action dated July 11, 2006, Applicants respectfully request reconsideration based on the following remarks. Applicants respectfully submit that the claims as presented are in condition for allowance.

**2. Rejection of Claims Under 35 U.S.C. §103(a)**

In the Office Action, claims 1, 4-8, 13-14, and 18-22 stand rejected under 35 U.S.C. §103(a) as allegedly being unpatentable over *Fitch* (U.S. Patent No. 5,912,653) in view of *Lin* (U.S. Patent No. 4,965,705). Claims 2 and 10-12 stand rejected under 35 U.S.C. §103(a) as allegedly being unpatentable over *Fitch* in view of *Lin* in further view of *Brett* (U.S. Patent No. 3,141,216). Claim 3 stands rejected under 35 U.S.C. §103(a) as allegedly being unpatentable over *Fitch* in view of *Lin* in further view of *Kweon*. Claim 23 stands rejected under 35 U.S.C. §103(a) as allegedly being unpatentable over *Fitch* in view of *Lin* in further view of *Kakita* (U.S. Patent No. 5,014,079).

It is well-established at law that, for a proper rejection of a claim under 35 U.S.C. §103 as being obvious based upon a combination of references, the cited combination of references must disclose, teach, or suggest, either implicitly or explicitly, all elements/features/steps of the claim at issue. *See, e.g., In Re Dow Chemical*, 5 U.S.P.Q.2d 1529, 1531 (Fed. Cir. 1988), and *In re Keller*, 208 U.S.P.Q.2d 871, 881 (C.C.P.A. 1981).

**a. Claim 1**

As provided in independent claim 1, Applicants claim:

A wearable electromagnetic (EM) radiation transmitter/receiver comprising:

a front portion;

a rear portion, wherein the front portion includes transmission and reception sections and is adapted to be worn outside a wearer's clothing, and wherein the rear portion includes a control section and is worn inside at least part of the wearer's clothing, the front and rear portions being operable to communicate with one another; and

*a means to secure the front and the rear portion in position on a wearer's clothing, the securing means being configured when in use to be operable through a thickness of the wearer's clothing between the front and the rear portion.*

Serial No.: 10/078,742  
Art Unit: 2622

(Emphasis added).

Applicants respectfully submit that independent claim 1 is allowable for at least the reason that *Fitch* in view of *Lin* is inadequate in teaching or suggesting at least "a means to secure the front and the rear portion in position on a wearer's clothing, the securing means being configured when in use to be operable through a thickness of the wearer's clothing between the front and the rear portion," as recited in claim 1.

Applicants fails to appreciate how it is obvious to combine *Fitch* with *Lin*. *Fitch* teaches a garment with a flat panel color liquid crystal display embedded in the garment. *Fitch* teaches that the liquid crystal display is clamped in place by a slide lock fastener that is sewn into the garment and a second fastener that is bonded to an inner side of the garment. See col. 3, lines 4-15. *Fitch* further teaches that a GPS system is built into the garment to provide security against theft. See col. 4, lines 41-47. *Lin*, on the other hand, teaches an electronic badge that is clamped to a wearer's clothing using two pins that are engaged in two clips. See col. 2, lines 47-52. In considering the combination of references, the fastening mechanism taught by *Lin* seems to teach against the type of fastening mechanism that *Fitch* suggests should be used for its liquid crystal display. When *Fitch* is so obviously concerned with securing the liquid crystal display to a garment to protect the device and to prevent theft (e.g., sewing and bonding a lock fastener to the garment), it is not understood how a fastening mechanism taught by *Lin* is consistent with those objectives.

Further, *Fitch* discloses that "the electronics of the invention on the circuit board, is suitably housed to protect it and then preferably is mounted inside the garment by, for example, a slide lock fastener material bonded to the inside of the jacket to hold the electronics and the liquid crystal display in place." Col. 5, lines 48-52 (Emphasis added). Also, *Fitch* states that a "second fastener 20 is bonded to an inner side of the jacket and clamps a microcontroller 22 and circuit board 24 to the jacket. Although, a single microcontroller 22 is illustrated, it is understood that any number of microcontrollers 22 and displays 12 may be used." Col. 3, lines 9-13 (Emphasis added). Also, FIG. 6 of *Fitch* shows a circuit board 88 having microcontroller 22 and transmitter/receiver (x + r) 72, where the circuit board 88 does not contain LCD 12. As such, *Fitch* seemingly discloses that a transmitter/receiver is located inside the garment. For at least this reason, *Fitch* fails to teach or suggest "wherein the front portion includes transmission and reception sections and is adapted to be worn outside a wearer's clothing," as recited in the claim.

Serial No.: 10/078,742  
Art Unit: 2622

Additionally, in the present final Office Action, it states that the "Fitch reference never states the garment electronic cannot use other type of fastening mechanism, such as pins engaged in to clips." Page 2. In response, Applicants submit that *Fitch* appears to provide no suggestion or motivation for modifying its teachings to include the suggested fastening mechanisms since they do not appear to be consistent with the teachings of *Fitch*. Referencing back to the final Office Action, it further states that a GPS system is built into the *Fitch* garment to provide security against theft. The final Office Action states that "The GPS system is nothing to do with choosing what type of fastening mechanism for securing the electronic device on the garment (cloth)." Page 2. Further, the final Office Action states that the "Lin reference is evidence that one of ordinary skill in the art at the time to see more advantages the wearable electronic device using an electrically conducting connection pen to secure the front and rear portions so that wearer can easily attach or detach both front and rear portions of device from cloth." Page 3. In response, Applicants note that *Fitch* discloses that the GPS unit 74 is "to provide for security against theft. Information as to the location of the jacket can be used and broadcast to inform law enforcement as well as friends to give information of the position of and location of the wearer of the jacket." Col. 4, lines 43-47. Therefore, the liquid crystal display in *Fitch* is seemingly intended to be fastened securely to a jacket, such that theft of the jacket itself is more likely than then theft of the liquid crystal display by itself. As such, the reasoning for the proposed modifications of allowing easily attachment and detachment of front and rear portions using "pins engaged in to clips" does not appear to be supported by the *Fitch* reference.

As a result, Applicants respectfully submit that the proposed combination is not obvious and the rejection should be withdrawn for the foregoing reasons.

b. Claims 2-14 and 20-23

Because independent claim 1 is allowable over the cited art of record, dependent claims 2-14 and 20-23 (which depend from independent claim 1) are allowable as a matter of law for at least the reason that the dependent claims 2-14 and 20-23 contain all the elements and features of independent claim 1 and the cited art of *Brett*, *Kweon*, and *Kakita* fail to cure the deficiencies of the *Fitch* and *Lin* references in suggesting or teaching all of the claimed features in claims 2-14 and 20-23 (which depend from independent claim 1). Therefore, a *prima facie* case establishing an obviousness rejection by the proposed combination of *Fitch*

Serial No.: 10/078,742  
Art Unit: 2622

in view of *Lin* in further view of the cited art has not been made with regard to claims 2-14 and 20-23. Therefore, the rejections of claims 2-14 and 20-23 should be withdrawn.

Additionally and notwithstanding the foregoing reasons for allowability of claims 2-14 and 20-23, these claims recite further features and/or combinations of features (as is apparent by examination of the claim itself) that are patentably distinct from the cited art of record. Accordingly, the rejections to these claims should be withdrawn.

For example, with regard to claim 5, *Fitch* appears to teach at most a liquid crystal display (LCD) embedded into a garment. The liquid crystal display is disclosed to be an output device that can display digital and analog video signals. Accordingly, the liquid crystal display is not disclosed to be an image capture means. While *Fitch* does suggest that inputs from an analog video storage device may be selected for display on the liquid crystal display, where a video camera 40, video recorder 38, and video tuner 36 are mentioned as video storage devices, *Fitch* clearly states that "these three storage devices are optional accessories and are external to the jacket." See col. 3, lines 34-44 and col. 4, lines 17-20. Therefore, *Fitch* in view of *Lin* fails to teach or suggest claim 5.

c. Claim 18

As provided in independent claim 18, Applicants claim:

A wearable electromagnetic (EM) radiation transmitter/receiver comprising:

a front portion and

a rear portion, *wherein the front portion includes transmission and reception sections and is adapted to be worn outside a wearer's clothing, and wherein the rear portion includes a control section and is adapted to be worn inside at least part of the wearer's clothing, in which the front and rear portions are operable to communicate electrically with one another, and are physically connected to one another, in which the front and rear portions are electrically connected by means of an electrically conducting connection pin that penetrates the wearer's clothing and fixes the front and rear portions in place.*

(Emphasis added).

Applicants respectfully submit that independent claim 18 is allowable for at least the reason that *Fitch* in view of *Lin* is inadequate in teaching or suggesting at least the feature "wherein the front portion includes transmission and reception sections and is adapted to be worn outside a wearer's clothing, and wherein the rear portion includes a control section and

Serial No.: 10/078,742  
Art Unit: 2622

is adapted to be worn inside at least part of the wearer's clothing, in which the front and rear portions are operable to communicate electrically with one another, and are physically connected to one another, in which the front and rear portions are electrically connected by means of an electrically conducting connection pin that penetrates the wearer's clothing and fixes the front and rear portions in place," as recited in claim 18.

Applicants fails to appreciate how it is obvious to combine *Fitch* with *Lin*. *Fitch* teaches a garment with a flat panel color liquid crystal display embedded in the garment. *Fitch* teaches that the liquid crystal display is clamped in place by a slide lock fastener that is sewn into the garment and a second fastener that is bonded to an inner side of the garment. *See* col. 3, lines 4-15. *Fitch* further teaches that a GPS system is built into the garment to provide security against theft. *See* col. 4, lines 41-47. *Lin*, on the other hand, teaches an electronic badge that is clamped to a wearer's clothing using two pins that are engaged in two clips. *See* col. 2, lines 47-52. In considering the combination of references, the fastening mechanism taught by *Lin* seems to teach against the type of fastening mechanism that *Fitch* suggests should be used for its liquid crystal display. When *Fitch* is so obviously concerned with securing the liquid crystal display to a garment to protect the device and to prevent theft (e.g., sewing and bonding a lock fastener to the garment), it is not understood how a fastening mechanism taught by *Lin* is consistent with those objectives. Applicants respectfully submit that the proposed combination is not obvious and the rejection should be withdrawn.

Further, *Fitch* discloses that "the electronics of the invention on the circuit board, is suitably housed to protect it and then preferably is mounted inside the garment by, for example, a slide lock fastener material bonded to the inside of the jacket to hold the electronics and the liquid crystal display in place." Col. 5, lines 48-52 (Emphasis added). Also, *Fitch* states that a "second fastener 20 is bonded to an inner side of the jacket and clamps a microcontroller 22 and circuit board 24 to the jacket. Although, a single microcontroller 22 is illustrated, it is understood that any number of microcontrollers 22 and displays 12 may be used." Col. 3, lines 9-13 (Emphasis added). Also, FIG. 6 of *Fitch* shows a circuit board 88 having microcontroller 22 and transmitter/receiver (x + r) 72, where the circuit board 88 does not contain LCD 12. As such, *Fitch* seemingly discloses that a transmitter/receiver is located inside the garment. For at least this reason, *Fitch* fails to teach or suggest "wherein the front portion includes transmission and reception sections and is adapted to be worn outside a wearer's clothing," as recited in claim 18.

Serial No.: 10/078,742  
Art Unit: 2622

Additionally, in the present final Office Action, it states that the "Fitch reference never states the garment electronic cannot use other type of fastening mechanism, such as pins engaged in to clips." Page 2. In response, Applicants submit that *Fitch* appears to provide no suggestion or motivation for modifying its teachings to include the suggested fastening mechanisms since they do not appear to be consistent with the teachings of *Fitch*. Referencing back to the final Office Action, it further states that a GPS system is built into the *Fitch* garment to provide security against theft. The final Office Action states that "The GPS system is nothing to do with choosing what type of fastening mechanism for securing the electronic device on the garment (cloth)." Page 2. Further, the final Office Action states that the "Lin reference is evidence that one of ordinary skill in the art at the time to see more advantages the wearable electronic device using an electrically conducting connection pen to secure the front and rear portions so that wearer can easily attach or detach both front and rear portions of device from cloth." Page 3. In response, Applicants note that *Fitch* discloses that the GPS unit 74 is "to provide for security against theft. Information as to the location of the jacket can be used and broadcast to inform law enforcement as well as friends to give information of the position of and location of the wearer of the jacket." Col. 4, lines 43-47. Therefore, the liquid crystal display in *Fitch* is seemingly intended to be fastened securely to a jacket, such that theft of the jacket itself is more likely than then theft of the liquid crystal display by itself. As such, the reasoning for the proposed modifications of allowing easily attachment and detachment of front and rear portions using "pins engaged in to clips" does not appear to be supported by the *Fitch* reference.

As a result, Applicants respectfully submit that the proposed combination is not obvious and the rejection should be withdrawn for the foregoing reasons.

d. Claim 19

As provided in independent claim 19, Applicants claim:

A wearable electromagnetic (EM) radiation transmitter/receiver comprising:

a front portion and

a rear portion, *wherein the front portion includes transmission and reception sections and is adapted to be worn outside a wearer's clothing, and wherein the rear portion includes a control section and is adapted to be worn inside at least part of the wearer's clothing, in which the front and rear portions are operable to communicate electrically with one another, in which the front portion is secured to the rear portion and to the wearer's clothing by mating the front portion that is outside of the wearer's clothing*

Serial No.: 10/078,742  
Art Unit: 2622

*with the rear portion that is inside the wearer's clothing via a securing means.*

(Emphasis added).

Applicants respectfully submit that independent claim 19 is allowable for at least the reason that *Fitch* in view of *Lin* is inadequate in teaching or suggesting at least the feature of "wherein the front portion includes transmission and reception sections and is adapted to be worn outside a wearer's clothing, and wherein the rear portion includes a control section and is adapted to be worn inside at least part of the wearer's clothing, in which the front and rear portions are operable to communicate electrically with one another, in which the front portion is secured to the rear portion and to the wearer's clothing by mating the front portion that is outside of the wearer's clothing with the rear portion that is inside the wearer's clothing via a securing means," as recited in claim 19.

Applicants fails to appreciate how it is obvious to combine *Fitch* with *Lin*. *Fitch* teaches a garment with a flat panel color liquid crystal display embedded in the garment. *Fitch* teaches that the liquid crystal display is clamped in place by a slide lock fastener that is sewn into the garment and a second fastener that is bonded to an inner side of the garment. See col. 3, lines 4-15. *Fitch* further teaches that a GPS system is built into the garment to provide security against theft. See col. 4, lines 41-47. *Lin*, on the other hand, teaches an electronic badge that is clamped to a wearer's clothing using two pins that are engaged in two clips. See col. 2, lines 47-52. In considering the combination of references, the fastening mechanism taught by *Lin* seems to teach against the type of fastening mechanism that *Fitch* suggests should be used for its liquid crystal display. When *Fitch* is so obviously concerned with securing the liquid crystal display to a garment to protect the device and to prevent theft (e.g., sewing and bonding a lock fastener to the garment), it is not understood how a fastening mechanism taught by *Lin* is consistent with those objectives. Applicants respectfully submit that the proposed combination is not obvious and the rejection should be withdrawn.

Further, *Fitch* discloses that "the electronics of the invention on the circuit board, is suitably housed to protect it and then preferably is mounted inside the garment by, for example, a slide lock fastener material bonded to the inside of the jacket to hold the electronics and the liquid crystal display in place." Col. 5, lines 48-52 (Emphasis added). Also, *Fitch* states that a "second fastener 20 is bonded to an inner side of the jacket and clamps a microcontroller 22 and circuit board 24 to the jacket. Although, a single

Serial No.: 10/078,742  
Art Unit: 2622

microcontroller 22 is illustrated, it is understood that any number of microcontrollers 22 and displays 12 may be used.” Col. 3, lines 9-13 (Emphasis added). Also, FIG. 6 of *Fitch* shows a circuit board 88 having microcontroller 22 and transmitter/receiver (x + 1) 72, where the circuit board 88 does not contain LCD 12. As such, *Fitch* seemingly discloses that a transmitter/receiver is located inside the garment. For at least this reason, *Fitch* fails to teach or suggest “wherein the front portion includes transmission and reception sections and is adapted to be worn outside a wearer’s clothing,” as recited in claim 19.

Additionally, in the present final Office Action, it states that the “*Fitch* reference never states the garment electronic cannot use other type of fastening mechanism, such as pins engaged in to clips.” Page 2. In response, Applicants submit that *Fitch* appears to provide no suggestion or motivation for modifying its teachings to include the suggested fastening mechanisms since they do not appear to be consistent with the teachings of *Fitch*. Referencing back to the final Office Action, it further states that a GPS system is built into the *Fitch* garment to provide security against theft. The final Office Action states that “The GPS system is nothing to do with choosing what type of fastening mechanism for securing the electronic device on the garment (cloth).” Page 2. Further, the final Office Action states that the “Lin reference is evidence that one of ordinary skill in the art at the time to see more advantages the wearable electronic device using an electrically conducting connection pen to secure the front and rear portions so that wearer can easily attach or detach both front and rear portions of device from cloth.” Page 3. In response, Applicants note that *Fitch* discloses that the GPS unit 74 is “to provide for security against theft. Information as to the location of the jacket can be used and broadcast to inform law enforcement as well as friends to give information of the position of and location of the wearer of the jacket.” Col. 4, lines 43-47. Therefore, the liquid crystal display in *Fitch* is seemingly intended to be fastened securely to a jacket, such that theft of the jacket itself is more likely than then theft of the liquid crystal display by itself. As such, the reasoning for the proposed modifications of allowing easily attachment and detachment of front and rear portions using “pins engaged in to clips” does not appear to be supported by the *Fitch* reference.

As a result, Applicants respectfully submit that the proposed combination is not obvious and the rejection should be withdrawn for the foregoing reasons.

Serial No.: 10/078,742  
Art Unit: 2622

***CONCLUSION***

In light of the foregoing amendments and for at least the reasons set forth above, Applicants respectfully submit that all objections and/or rejections have been traversed, rendered moot, and/or accommodated, and that the now pending claims are in condition for allowance. Favorable reconsideration and allowance of the present application and all pending claims are hereby courteously requested. If, in the opinion of the Examiner, a telephonic conference would expedite the examination of this matter, the Examiner is invited to call the undersigned agent at (770) 933-9500.

Respectfully submitted,

  
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